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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/801,503 | 03/15/2004 | Guido Gabriele Albasini | 2110-111-03 | 1822 |

7590 11/04/2009
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| EXAMINER |
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TRAN, KHANH C

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| ART UNIT | PAPER NUMBER |
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2611

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11/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/801,503 | Applicant(s) ALBASINI ET AL. | |
| | Examiner KHANH C. TRAN | Art Unit 2611 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 25-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 27 and 28 is/are allowed.
- 6) ☒ Claim(s) 25, 29-31, 34 and 35 is/are rejected.
- 7) ☒ Claim(s) 26, 32 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Amendment filed on 7/1/2009 has been entered. Claims 1-10 and 25-35 are still pending in this Office action.

Response to Arguments

2. Applicant's arguments with respect to claims 25, 29-31 and 34-35 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments, see Applicants' Remarks, filed on 7/1/2009, with respect to ***claims 10, 31 and 32-34 under 35 U.S.C 101 rejection*** have been fully considered and are persuasive. The rejection of claims 10, 31 and 32-34 has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 25, 29-31 and 34-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Dent U.S. Patent 5,834,987.

Regarding claims 25 and 35, Dent teaches a phase locked loop (Dent FIG. 3 modulatable synthesizers, column 7 lines 4-12) comprising a phase-frequency detector (phase detector 100, see column 7 lines 32-37) operable to generate a phase-error signal (output of phase detector 100, see FIG. 3) based on a comparison of a reference signal (FREF, see FIG. 3) and a feedback signal (output from variable divider 106; see column 7 lines 22-27); a control circuit (sigma-delta modulator 107, see column 7 lines 5-12) coupled to the phase-frequency detector (phase detector 100, see column 7 lines 32-37) and operable to generate a conditioning signal (output of integrator 1071, see column 7 lines 12-20) based on a modulation value (modulation voltage between 0 and V_{cc} , see column 7 lines 5-8) and the feedback signal (output from variable divider 106; see column 7 lines 22-27); and a generator (VCO 104, column 7 lines 5-12) coupled to the control circuit (sigma-delta modulator 107, see column 7 lines 5-12) and the phase-frequency detector (phase detector 100, see column 7 lines 32-37) and operable to receive a control signal (input to loop filter 102 via adding junction 103, see column 7 lines 8-13) to generate an output signal, the control signal (input to loop filter 102 via adding junction 103, see column 7 lines 8-13) based on a summation (adder (compensation injector) 101, column 8 lines 10-17) of the phase-error signal (output of phase detector 100, see FIG. 3) and conditioning signal (output of integrator 1071 via adder 101, see column 7 lines 12-20).

Regarding claim 29, Dent FIG. 3 further discloses a loop filter 102 that corresponds to the filter claimed.

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Regarding claim 30, referring to Dent FIG. 3, Dent teaches a multi-modulus frequency divider (a variable divider 106, see column 7 lines 11-15) coupled to the phase-frequency detector (phase detector 100, column 7 lines 57-62) and operable to modify the feedback signal (VCO 104 output, see FIG. 3) based on the modulation value (modulation voltage 0 to V_{cc} , see column 7 lines 5-10).

Regarding claim 31, claim is rejected on the same ground as for claim 25 because of similar scope.

Regarding claim 34, Dent FIG. 3 discloses the step of filtering (loop filter 102, see column 7 lines 7-12) the modified phase-error signal (output of adder 101, see column 8 lines 11-16).

Regarding claim 35, claim is rejected on the same ground as for claim 25 because of similar scope.

Allowable Subject Matter

5. Claims 1-10 and 27-28 are allowed.

6. Claims 26 and 32-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH C. TRAN whose telephone number is (571)272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCT

***/KHANH C. TRAN/
Primary Examiner, Art Unit 2611***